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| Name: | Date: |
| Course/Subject: Keystone Algebra I | Team: |
| Topic: Polynomials | School District: Blue Mountain |

Key Learning: Solution of quadratic equations by factoring.

Unit Essential Question: How are quadratics solved using factoring?

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| Concept: Addition and subtraction | Concept: Multiplication | Concept: Factoring |
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| Lesson Essential Questions:   * How are the operations of addition and subtraction applied to polynomials? * Describe the difference between monomial and a polynomial. (ET) | Lesson Essential Questions:   * How do you multiply polynomials? * Describe how to multiply two polynomials. (ET) | Lesson Essential Questions:   * How do you identify and factor the greatest common monomial factor from a polynomial? * How do you identify and factor the different types of polynomials? * Describe the different factoring methods and the uses of each. (ET) |
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| Vocabulary:   * Polynomial * Monomial * Binomial * Trinomial | Vocabulary:   * Distributive property * FOIL | Vocabulary:   * Perfect square trinomial * Different of squares * Leading coefficient * Factor by grouping * Quadratic term * Linear term * Constant * Roots * Extraneous roots |
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| Additional Information/Resources: Calculators  PA Standards: 2.8 | | |

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| Concept: Simplifying rational expressions | Concept: | Concept: | Concept: | Concept: |
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| Lesson Essential Questions:   * What is a rational expression? * How do we simplify a rational expression? * What makes an expression a rational expression? (ET) | Lesson Essential Questions: | Lesson Essential Questions: | Lesson Essential Questions: | Lesson Essential Questions: |
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| Vocabulary:   * Simplifying * Rational expressions | Vocabulary: | Vocabulary: | Vocabulary: | Vocabulary: |